### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner

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Applicants

Christian Behl and Bernd Moosmann

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For

TRYPOTOPHANYL-ESTERS AND THEIR N-ACYL DERIVATIVES FOR PREVENTING AND TREATING DISEASES CAUSED OR AGGRAVATED BY OXIDATION

**PROCESSES** 

New York, New York March 16, 2001

Hon. Commissioner for Patents Washington, D.C. 20231

# PRELIMINARY AMENDMENT

Sir:

Prior to examining this application, kindly amend the application as follows:

#### IN THE SPECIFICATION

Add the following paragraph as the first sentence of the specification directly following the title:

This application is a continuation of International Application No. PCT/EP/99/06819 designating the United States, filed September 15, 1999.

#### IN THE CLAIMS

Cancel claim 13.

Amend claims 1-12 as follows:

- 1. (Amended) A method for treating or preventing degenerative and/or cancer diseases caused by oxidative processes comprising the administration of a therapeutic amount of a composition comprising a D- or L-tryptophanyl-ester or its N-acyl derivative.
- 2. (Amended) The method according to claim 1 or 14, wherein the D- or L-tryptophanyl-ester or its N-acyl derivative is selected from the group consisting of: tryptophanoctyl-ester, tryptophandodecyl-ester, tryptophanstearyl-ester, tryptophanoctyl-ester, tryptophanoleyl-ester, N-acetyl-tryptophanoctyl-ester, N-acetyl-tryptophanodecyl-ester, N-acetyl-tryptophanotyl-ester, N-acetyl-tryptophanoleyl-ester, N-acetyl-tryptophanoctyl-ester, N-dodecanoyl-tryptophanoctyl-ester, N-dodecanoyl-tryptophandodecyl-ester, N-dodecanoyl-tryptophanstearyl-ester, N-dodecanoyl-tryptophanpalmityl-ester, N-dodecanoyl-tryptophanoleyl-ester, N-acetyl-tryptophanethyl-ester, N-hexoyl-tryptophanethyl-ester, N-octoyl-tryptophanethyl-ester, N-dodecanoyl-tryptophanethyl-ester, N-stearoyl-tryptophanethyl-ester, N-palmitoyl-tryptophanethyl-ester and N-oleoyl-tryptophanethyl-ester.
  - 3. (Amended) The method according to claim 1 or 14, wherein the D- or

L-tryptophanethyl-ester or its N-acetyl derivative is selected from the group consisting of tryptophanoctyl-ester, N-oleoyl-tryptophanethyl-ester and N-dodecanoyl-tryptophanethyl-ester.

- 4. (Amended) The method according to any one of claims 1, 2 or 14, wherein the disease is a neurodegenerative disease.
- 5. (Amended) The method according to claim 4, wherein the neurodegenerative disease is Alzheimer's disease, Parkinson's disease, apoplectic fit or amyotrophic lateral sclerosis.
- 6. (Amended) The method according to any one of claims 1, 2 or 14, wherein the disease is cataract.
- 7. (Amended) The method according to claim 6, wherein the cataract is Cataracta senilis, Cataracta juvenilis, Cataracta diabetica or Cataracta complicata.
- 8. (Amended) The method according to any one of claims 1, 2 or 14, wherein the disease is a neoplastic disease.
- 9. (Amended) The method according to claim 8, wherein the neoplastic disease is selected from the group consisting of prostatic carcinoma, mammary carcinoma, liver carcinoma, kidney carcinoma, colon carcinoma, gastric carcinoma and lung (bronchial) carcinoma.
- 10. (Amended) The method according to any one of claims 1, 2 or 14, wherein the disease is a cardiovascular disease.
- 11. (Amended) The method according to claim 10, wherein the cardiovascular disease is arteriosclerosis or a myocardial infarction.

12. (Amended) A pharmaceutical composition comprising a D- or L-tryptophanyl-ester or its N-acyl derivative for the prophylaxis and/or therapy of oxidative pathologic processes in degenerative and/or cancer diseases and, optionally, a pharmaceutically acceptable carrier, alone or in combination with another antioxidatively effective pharmaceutical composition or pharmaceutical composition used with degenerative and/or cancer diseases.

Add claims 14-17 as follows:

14. (Added) The method according to claim 1, wherein the D- or L-tryptophanyl-ester or its N-acyl derivative has the following formula:

wherein X is C(O)R1 or H, and R1 is a saturated  $C_2$ - $C_{18}$  carbon hydrogen residue and R2 is a saturated or unsaturated  $C_2$ - $C_{18}$  carbon hydrogen residue.

15. (Added) The pharmaceutical composition according to claim 12, wherein the D- or L-tryptophanyl-ester or its N-acyl derivative has the following formula:

wherein X is C(O)R1 or H, and R1 is a saturated  $C_2$ - $C_{18}$  carbon hydrogen residue and R2 is a saturated or unsaturated  $C_2$ - $C_{18}$  carbon hydrogen residue.

- the D- or L-tryptophanyl-ester or its N-acyl derivative is selected from the group consisting of tryptophanoctyl-ester, tryptophandodecyl-ester, tryptophanstearyl-ester, tryptophanoctyl-ester, tryptophanoleyl-ester, N-acetyl-tryptophanoctyl-ester, N-acetyl-tryptophanodecyl-ester, N-acetyl-tryptophanodecyl-ester, N-acetyl-tryptophanoleyl-ester, N-acetyl-tryptophanoleyl-ester, N-acetyl-tryptophanoleyl-ester, N-dodecanoyl-tryptophanoctyl-ester, N-dodecanoyl-tryptophandodecyl-ester, N-dodecanoyl-tryptophanoleyl-ester, N-dodecanoyl-tryptophanoleyl-ester, N-acetyl-tryptophanethyl-ester, N-hexoyl-tryptophanethyl-ester, N-octoyl-tryptophanethyl-ester, N-dodecanoyl-tryptophanethyl-ester, N-dodecanoyl-tryptophanethyl-ester, N-dodecanoyl-tryptophanethyl-ester, N-stearoyl-tryptophanethyl-ester, N-palmitoyl-tryptophanethyl-ester and N-oleoyl-tryptophanethyl-ester.
- 17. (Added) The pharmaceutical composition according to claim 12, wherein the D- or L-tryptophanethyl-ester or its N-acetyl derivative is selected from the group consisting of tryptophanoctyl-ester, N-oleoyl-tryptophanethyl-ester and N-dodecanoyl-tryptophanethyl-ester.

### **REMARKS**

Applicants have amended the specification to make reference to a priority claim to International Application No. PCT/EP99/06819, filed on September 15, 1999.

Applicants have canceled claim 13 without prejudice and added claims 14-17. Support for claim 14 may be found, *inter alia*, on page 6, lines 4-10. Support for claims 15-17

may be found, *inter alia*, in claim 12 as originally filed. Applicants have amended claims 1-12 to improve their form. Specifically, applicants have amended the format of claims 1-11 to recite "a method for treating or preventing a disease" instead of a "use" of the compounds in this invention. Applicants have also amended claims 2-12 to add dependency from added claim 14. Applicants have amended claim 12 to recite the article "A" before the first word in the claim. A marked-up copy of the amended claims is attached hereto as Appendix A.

Claims 1-12 and 14-17 are now pending. None of the amendments add new matter.

Entry of the amendments is requested.

Respectfully submitted,

James F. Haley, Jr. (Reg. No. 27,794)

Attorney for Applicants

Elinor K. Shin (Reg. No. 43,117)

Agent for Applicants

c/o FISH & NEAVE (Customer No. 1473)

1251 Avenue of the Americas

New York, New York 10020-1104

Tel.: (212) 596-9000

Fax.: (212) 596-9090

# APPENDIX A

- 1. [Use of a D- or L-tryptophanyl-ester or its N-acyl derivative for producing a pharmaceutical composition for the prophylaxis and therapy of oxidative pathologic processes in degenerative diseases and/or cancer diseases.] A method for treating or preventing degenerative and/or cancer diseases caused by oxidative processes comprising the administration of a therapeutic amount of a composition comprising a D- or L-tryptophanyl-ester or its N-acyl derivative.
- 2. [Use] The method according to claim 1 or 14, wherein the D- or L-tryptophanyl-ester or its N-acyl derivative is [the following substance] selected from the group consisting of:
  tryptophanoctyl-ester, tryptophandodecyl-ester, tryptophanstearyl-ester, tryptophanoleyl-ester, N-acetyl-tryptophanoctyl-ester, N-acetyl-tryptophanodecyl-ester,
  N-acetyl-tryptophanstearyl-ester, N-acetyl-tryptophanpalmityl-ester, N-acetyl-tryptophanoleyl-ester,
  N-dodecanoyl-tryptophanoctyl-ester, N-dodecanoyl-tryptophandodecyl-ester,
  N-dodecanoyl-tryptophanstearyl-ester, N-dodecanoyl-tryptophanpalmityl-ester, N-dodecanoyl-tryptophanethyl-ester, N-octoyl-tryptophanethyl-ester, N-acetyl-tryptophanethyl-ester, N-stearoyl-tryptophanethyl-ester,
  N-palmitoyl-tryptophanethyl-ester or N-oleoyl-tryptophanethyl-ester.
  - 3. [Use] The method according to claim 1 or 14, wherein the D- or

L-tryptophanethyl-ester or its N-acetyl derivative is <u>selected from the group consisting of</u> tryptophanoctyl-ester, N-oleoyl-tryptophanethyl-ester or N-dodecanoyl-tryptophanethyl-ester.

- 4. [Use] <u>The method</u> according to any one of claims 1 [to 3], <u>2 or 14</u> [for the treatment and/or prophylaxis of], <u>wherein the disease is a neurodegenerative [diseases]</u>
- 5. [Use] <u>The method</u> according to claim 4, wherein the neurodegenerative disease is Alzheimer's disease, Parkinson's disease, apoplectic fit or amyotrophic lateral sclerosis.
- 6. [Use] <u>The method</u> according to any one of claims 1 [to 3], <u>2 or 14</u> [for the treatment and/or prophylaxis], <u>wherein the disease is [of cataracts] cataract</u>.
- 7. [Use] <u>The method</u> according to claim 6, wherein the cataract is Cataracta senilis, Cataracta juvenilis, Cataracta diabetica or Cataracta complicata.
- 8. [Use] <u>The method</u> according to any one of claims 1 [to 3], <u>2 or 14</u> [for the treatment and/or prophylaxis of], <u>wherein the disease is a neoplastic [diseases]</u> <u>disease</u>.
- 9. [Use] The method according to claim 8, wherein the neoplastic disease is [the] selected from the group consisting of prostatic carcinoma, [the] mammary carcinoma, [the] liver carcinoma, [the] kidney carcinoma, [the] colon carcinoma, [the] gastric carcinoma [or] and [the] lung (bronchial) carcinoma.
- 10. [Use] <u>The method</u> according to any one of claims 1 [to 3], 2 or 14 [for the treatment and/or prophylaxis of], wherein the disease is a cardiovascular [diseases] <u>disease</u>.
- 11. [Use] <u>The method</u> according to claim 10, wherein the cardiovascular disease is arteriosclerosis or a myocardial infarction.
  - 12. <u>A pharmaceutical</u> [Pharmaceutical] composition comprising a D- or

L-tryptophanyl-ester or its N-acyl derivative [according to any one of claims 1 to 3] for the prophylaxis and/or therapy of oxidative pathologic processes in degenerative and/or cancer diseases and, optionally, a pharmaceutically acceptable carrier, alone or in combination with [other] another antioxidatively effective pharmaceutical [compositions] composition or pharmaceutical [compositions] composition used with degenerative and/or cancer diseases.